

S/N 10/010,466
Filed October 26, 2001
Docket No. 16373

R E M A R K S

The Examiner required selection between five groups of inventions. Applicants confirm the election of group 1, claims 1 – 13 and 31, 32, 33 as well as the species of Poly(diallyldimethylammonium chloride-co-diacetone acrylamide), VARISOFT® 222, ethylene glycol monoethyl ether, and ammonium oxalate.

Applicants acknowledge the Examiner's objection to the specification because of the improper use of tradenames. Applicants will submit a substitute specification with the required corrections in the near future and ask the Examiner's forbearance in the interim.

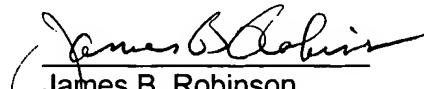
The claims have been amended to obviate the objections and §112 rejections.

Applicants acknowledge the provisional double patenting rejection based on co-pending commonly assigned application 10/686,683 (KC docket number 16267) in light of Buecheler (US patent 3,418,064). A terminal disclaimer will be filed if it proves necessary.

US Patent application 10/686,683 and this application 10/010,466 were, at the time the invention was made, subject to an obligation of assignment to the same person.

Should the Examiner have any issues she would like to discuss in order to facilitate the progression of this application, she is encouraged to call the undersigned at (770)-587-7273.

Respectfully submitted,


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What is claimed is:

1. (currently amended) An aqueous coating formulation containing solids, for enhancing image visualization and retention of acid dye-based inks, comprising:
 - a) a cationic polymer homopolymer or copolymer,
 - b) a fabric softener,
 - c) urea, and
 - d) ammonium oxalate.
2. (currently amended) The aqueous coating formulation of claim 1 wherein said cationic polymer or copolymer is present in an amount between about 5 to and 95% weight percent of the total solids.
3. (currently amended) The aqueous coating formulation of claim 1 wherein said fabric softener is present in an amount between about 5 to and 20% weight percent of the total solids.
4. (original) The aqueous coating formulation of claim 1 further comprising a latex binder.
5. (currently amended) The aqueous coating formulation of claim 4 wherein said latex binder is present in an amount between about 0 to and 80% weight percent of the total solids.
6. (currently amended) The aqueous coating formulation of claim 1 wherein the urea is present in an amount between about 2 and 5% weight percent of the total solids.
7. (currently amended) The aqueous coating formulation of claim 1 wherein the ammonium oxalate is present in an amount between about 5 and 10% weight percent of the total solids.

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8. (original) The aqueous coating formulation of claim 1 further including additives selected from the group including wetting agents, defoamers, and surfactants.
9. (original) The aqueous coating formulation of claim 1 further including at least one tanning agent.
10. (original) The aqueous coating formulation of claim 9 wherein said tanning agent is either ethylene glycol monoethyl ether, thiodiethylene glycol, or a combination thereof.
11. (currently amended) The aqueous coating formulation of claim 9, wherein said tanning agent is present in an amount of between about 0.5 and 10% weight percent of total solids.
12. (currently amended) An aqueous coating formulation containing solids, for enhancing image visualization and retention of inks, comprising:
 - a) a cationic polymer homopolymer or copolymer,
 - b) a fabric softener,
 - c) urea, and
 - d) ammonium oxalate.
13. (original) The aqueous coating formulation of claim 12 further comprising a tanning agent, said tanning agent being either ethylene glycol monoethyl ether, thiodiethylene glycol, or a combination thereof.
14. (withdrawn) An aqueous imbibing solution, for enhancing image visualization and retention of acid dye-based inks comprising:
 - a) ammonium oxalate, and
 - b) urea.

15. (withdrawn) The aqueous imbibing solution of claim 14, wherein said ammonium oxalate is present between about 30 and 40% of the total solids.
16. (withdrawn) The aqueous imbibing solution of claim 14, wherein said urea is present between about 50 and 70% of the total solids.
17. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, and which substrate will be exposed to a post-treatment step following printing, the method comprising the steps of:
 - a) providing a substrate,
 - b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and ammonium oxalate.
18. (withdrawn) The method of claim 17 wherein said aqueous coating formulation further includes a tanning agent.
19. (withdrawn) The method of claim 17 wherein said tanning agent is selected from either ethylene glycol monoethyl ether, thiodiethylene glycol, or a combination thereof.
20. (withdrawn) The method of claim 17 wherein said cationic polymer or copolymer is present in an amount between about 5 to 95% of the total solids.
21. (withdrawn) The method of claim 17 wherein said fabric softener is present in an amount between about 5 to 20% of the total solids.
22. (withdrawn) The method of claim 17 wherein the aqueous coating formulation further comprises a latex binder.

23. (withdrawn) The method of claim 22 wherein said latex binder is present in an amount between about 0 to 80% of the total solids.

24. (withdrawn) The method of claim 17 wherein the urea is present in an amount between about 2 and 5% of the total solids.

25. (withdrawn) The method of claim 17 wherein the ammonium oxalate is present in an amount between about 5 and 10% of the total solids.

26. (withdrawn) An article produced by the method of claim 17.

27. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, which will be exposed to a post-treatment step following printing, the method comprising the steps of:

- a) providing a substrate,
- b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, and a fabric softener,
- c) treating the substrate of step b) with an aqueous imbibing solution of urea, and ammonium oxalate.

28. (withdrawn) A method of producing a printed substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, the method comprising the steps of:

- a) providing a substrate,
- b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and ammonium oxalate,
- c) drying the substrate,
- d) printing on the substrate with an acid dye-based ink,

e) post-treating the printed substrate of step d).

29. (withdrawn) The method of claim 28 wherein the aqueous coating formulation includes a tanning agent.

30. (withdrawn) A printed substrate produced in accordance with the method of claim 28.

31. (currently amended) An aqueous coating formulation containing solids, for enhancing image visualization and retention of inks, comprising:

- a) a cationic polymer homopolymer or copolymer,
- b) a fabric softener,
- c) urea, and
- d) ammonium salts of multifunctional weak acids, selected from the group consisting of ammonium oxalate and ammonium tartrate.

32. (original) The aqueous coating formulation of claim 31 further comprising a tanning agent.

33. (original) The aqueous coating formulation of claim 32, said tanning agent being either ethylene glycol monoethyl ether, thiodiethylene glycol, or a combination thereof.

34. (withdrawn) An aqueous imbibing solution, for enhancing image visualization and retention of acid dye-based inks comprising:

- a) ammonium salts of multifunctional weak acids, selected from the group consisting of ammonium oxalate and ammonium tartrate, and
- b) urea.

35. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the

substrate, which will be exposed to a post-treatment step following printing, the method comprising the steps of:

- a) providing a substrate,
- b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, and a fabric softener,
- c) treating the substrate of step b) with an aqueous imbibing solution of urea, and ammonium salts of multifunctional weak acids, selected from the group consisting of ammonium oxalate and ammonium tartrate.

36. (withdrawn) A method of treating a substrate so as to improve the adhesion, colorfastness and washfastness of an acid dye-based ink jet ink printed onto the substrate, and which substrate will be exposed to a post-treatment step following printing, the method comprising the steps of:

- a) providing a substrate,
- b) treating the substrate with an aqueous coating formulation comprising a cationic polymer or copolymer, a fabric softener, urea, and ammonium salts of multifunctional weak acids, selected from the group consisting of ammonium oxalate and ammonium tartrate.